PS Example; Pages 63-64; 95pp; English.
CC The present sequence was used in the development of a novel method
CC for the identification of a patient's previous sensitisation to
CC Borellia burgdorferi sensu lato outer surface protein C (OspC).
CC The method comprises reacting immunoglobulin (Ig) or T cells from
CC the patient with a polypeptide of at most 60 amino acids containing
CC a peptide with at least 50% identity to the B. burgdorferi derived
CC sequence W41821, or its subsequences of at least 5 amino acids. The
CC degree of immunological reactivity between the polypeptide and Ig
CC or T cells is measured and significant reactivity is indicative of
CC sensitisation.
CC The method can be used to diagnose Lyme disease and is based on
CC reactivity with antibodies against the OspC protein. The test can
CC be done in vitro or in vivo, e.g. as a skin test. Vaccine
CC compositions comprising the polypeptide can be used to protect
CC humans and other animals against B. burgdorferi infection. The
CC polypeptide provides higher sensitivity than full-length OspC, and
CC so is better at detecting infection in its early stages, especially
CC when combined with the known assay for flagellar proteins. The
CC seven carboxy-terminal residues of W41821 represent an epitope
CC essential for human immune response to OspC. The polypeptide is
CC also easier to prepare and purify than (nearly) full-length
CC protein, facilitating standardisation of the assay, and is less
CC cross-reactive with antibodies raised against other antigens. The
CC small size of the polypeptide allows a high density of binding
CC sites to be created on a solid support. Incorporation of
CC non-natural amino acid into the polypeptide increases its
CC resistance to peptidases when used in vivo.
SQ Sequence 212 AA;

Query Match 4.8%; Score 8; DB 28; Length 212;
Best Local Similarity 100.0%; Pred. No. 6.48e-01;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 143 ghadlgkq 150
||||||||
Qy 121 GHADLGKQ 128

RESULT 8
ID R75729 standard; Protein; 212 AA.
AC R75729;
DT 31-JUL-1996 (first entry)
DE B. burgdorferi strain PKo outer surface protein C (OspC-PKo).
KW Strain PKo; outer surface protein; OspC; antigenic domain;
KW chimaeric protein; treatment; diagnosis; infection; vaccine;
KW Lyme borreliosis; immunodiagnostic assay; antibody;
KW T-cell reactivity; chimeric.
OS Borrelia burgdorferi.
PN WO9512676-A1.
PD 11-MAY-1995.
PF 27-OCT-1994; U12352.
PR 01-NOV-1993; US-148191.
PR 29-APR-1994; US-235836.
PA (ASUY-) ASSOC UNIVERSITIES INC.
PI Dunn JJ, Luft BJ;
DR WPI; 95-215034/28.
DR N-PSDB; Q90716.
PT Chimeric protein comprising 2 or more antigenic Borrelia
PT polypeptide(s) - useful in a vaccine against Lyme borreliosis and in
PT immuno:diagnostic assays
PS Example 1; Fig 14; 200pp; English.
CC The present sequence is the B. burgdorferi strain PKo, outer
CC surface protein C (OspC-PKo). Using chemical or enzymatic methods,
CC peptide fragments of OspC-PKo were prepd., and analysed by western
CC blot to assess their ability to bind different anti-OspC monoclonal
CC antibodies. The information obtd. was used to locate antigenic
CC domains in OspC-PKo, the epitopes of which were mapped with the
CC aid of site directed mutagenesis. Identical analyses were performed
CC on a selection of Osp purified from a variety of B. burgdorferi
CC strains, the results from which were utilised in the prepn. of a
CC pool of antigenic Borrelia polypeptides, and corresponding
CC [illegible] proteins comprising 2 or more antigenic
CC Borrelia polypeptides, that do not naturally occur in the same
CC protein, can be used in the treatment and diagnosis of Borrelia
CC infections, i.e. as a vaccine against Lyme borreliosis, in
CC immunodiagnostic assays to detect anti-Borrelia antibodies or to
CC measure T-cell reactivity.
SQ Sequence 212 AA;

Query Match 4.8%; Score 8; DB 17; Length 212;
Best Local Similarity 100.0%; Pred. No. 6.48e-01;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 143 ghadlgkq 150
||||||||
Qy 121 GHADLGKQ 128

RESULT 9
ID R13140 standard; Protein; 212 AA.
AC R13140;
DT 27-SEP-1991 (first entry)
DE B.burgdorferi strain PKo pC protein.
KW lyme borreliosis; vaccine; flagellin.
OS Borrelia burgdorferi.
PN WO9109870-A.
PD 11-JUL-1991.
PF 21-DEC-1990; E02282.
PR 22-DEC-1989; DE-942728.
PR 13-JUN-1990; DE-018988.
PA (MIKR-) MIKROGEN MOLEKULARB.
PI Fuchs R, Wilske B, Preac-Mursic V, Motz M, Soutschek E;
DR WPI; 91-222844/30.
DR N-PSDB; Q12746.
PT New Borrelia burgdorferi proteins - useful as immunoassay
PT reagents and antigens for vaccine prodn.
PS Claim 8; Page 48; 68pp; German.
CC Protein pC (22kD) was isolated from a B.burgdorferi cell lysate and
CC digested with trypsin. The amino acid sequence of two tryptic
CC fragments was determined. Probe pools corresponding to each
CC fragment were synthesised and used to screen a B.burgdorferi cDNA
CC library. A clone contg. the 639 nucleotides of the pC coding
CC sequence was identified and sequenced. The amino acid derived
CC from the pC gene is reproduced here. Decoding the 639 base pC gene,
CC however, gives a different amino acid sequence with Thr(29)-Ser(37),
CC inclusive replaced by HLLILLTSL. For this sequence to be directly
CC decoded from Q12748, an A residue must be inserted between G(84) and
CC C(85) of the nucleotide sequence and T(111) must be deleted.
CC See Q12744-Q12747, Q13297-8 and R13139-R13142.
SQ Sequence 212 AA;

Query Match 4.8%; Score 8; DB 3; Length 212;
Best Local Similarity 100.0%; Pred. No. 6.48e-01;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 143 ghadlgkq 150
||||||||
Qy 121 GHADLGKQ 128

RESULT 10
ID R62779 standard; Protein; 177 AA.
AC R62779;
DT 25-MAY-1995 (first entry)
DE Borrelia ACA1 antigen vaccine.
KW OspC antigen; vaccine; Lyme disease; borreliosis; immunogen;
KW serovar typing; restriction fragment length polymorphism;
KW RFLP; Pichia pastoris.
OS Borrelia burgdorferi ACA1.
PN WO9425596-A.
PD 10-NOV-1994.
PF 29-APR-1994; E01365.
PR 29-APR-1993; US-053863.
PA (IMMO) IMMUNO AG.
PI Crowe B, Dorner F, Livey I;

DR WPI; 94-358273/44.
DR N-PSDB; Q73891.
PT Immunogenic composition comprising OspC antigens - for the
PT treatment of Lyme borreliosis in different, specific geographical
PT areas.
PS Disclosure; Fig. 9; 115pp; English.
CC A vaccine for Lyme disease includes selected OspC antigen
CC formulations based on defined OspC families resolved by serovar
CC typing and RFLP typing. Partial sequences of OspC genes selected
CC from different RFLP types are given in Q73883-905 (encoded peptides,
CC comprising the first 92% of mature OspC, are given in R62771-93).
CC Complete sequences of these novel ospC genes, including the 3' end,
CC plus sequences for the ospC genes of Borrelia strains H13 and 28691
CC are given in Q73857-82, and encoded proteins in R60884-909. The
CC DNA sequences may be expressed in e.g. Pichia pastoris for
CC recombinant antigen production.
SQ Sequence 177 AA;

Query Match 4.2%; Score 7; DB 12; Length 177;
Best Local Similarity 100.0%; Pred. No. 1.03e+01;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 125 hadlgkq 131
||||||||
Qy 122 HADLGKQ 128

RESULT 11
ID R60893 standard; Protein; 193 AA.
AC R60893;
DT 25-MAY-1995 (first entry)
DE Borrelia ACA1 antigen vaccine.
KW OspC antigen; vaccine; Lyme disease; borreliosis; immunogen;
KW serovar typing; restriction fragment length polymorphism;
KW RFLP; Pichia pastoris.
OS Borrelia burgdorferi ACA1.
PN WO9425596-A.
PD 10-NOV-1994.
PF 29-APR-1994; E01365.
PR 29-APR-1993; US-053863.
PA (IMMO) IMMUNO AG.
PI Crowe B, Dorner F, Livey I;
DR WPI; 94-358273/44.
DR N-PSDB; Q73866.
PT Immunogenic composition comprising OspC antigens - for the
PT treatment of Lyme borreliosis in different, specific geographical
PT areas.
PS Disclosure; Fig. 9a; 115pp; English.
CC A vaccine for Lyme disease includes selected OspC antigen
CC formulations based on defined OspC families resolved by serovar
CC typing and RFLP typing. Partial sequences of OspC genes selected
CC from different RFLP types are given in Q73883-905 (encoded peptides,
CC comprising the first 92% of mature OspC, are given in R62771-93).
CC Complete sequences of these novel ospC genes, including the 3' end,
CC plus sequences for the ospC genes of Borrelia strains H13 and 28691
CC are given in Q73857-82, and encoded proteins in R60884-909. The
CC DNA sequences may be expressed in e.g. Pichia pastoris for
CC recombinant antigen production.
SQ Sequence 193 AA;

Query Match 4.2%; Score 7; DB 12; Length 193;
Best Local Similarity 100.0%; Pred. No. 1.03e+01;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 125 hadlgkq 131
||||||||
Qy 122 HADLGKQ 128

RESULT 12
ID W56767 standard; Protein; 323 AA.
AC W56767;
DT 13-OCT-1998 (first entry)
DE Homo sapiens PSP1 partial sequence.
KW PS-1; presenilin; presenilin-1; PSP-1; Alzheimer's disease;
KW serine protease; neurodegeneration; predisposition; diagnosis.
OS Homo sapiens.
PN EP-828003-A2.
PD 11-MAR-1998.
PF 26-AUG-1997; 306501.
PR 13-DEC-1996; US-032875.
PR 06-SEP-1996; US-025436.
PR 25-OCT-1996; US-027873.
PA (SMIK) SMITHKLINE BEECHAM CORP.
PA (SMIK) SMITHKLINE BEECHAM PLC.
PI Browne MJ, Clinkenbeard HE, Creasy CL, Karran EH,
PI Livi GP, Southan CD;
DR WPI; 98-161101/15.
DR N-PSDB; V29522.
PT Nucleic acids encoding human serum protease protein(s) - used for
PT diagnosing pre-disposition to Alzheimer's disease, etc.
PS Example 2; Page 18-19; 65pp; English.
CC The sequence is that of at least a fragment of the serine
CC protease PSP1. This can be used to identify modulators
CC of serine protease activity and also to diagnose a
CC condition associated with lack of one of the serine proteases
CC or a genetic predisposition to neurodegeneration in a patient,
CC preferably predisposition to Alzheimer's disease.
SQ Sequence 323 AA;

Query Match 4.2%; Score 7; DB 33; Length 323;
Best Local Similarity 100.0%; Pred. No. 1.03e+01;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 291 lsssl la 297
||||||||
Qy 17 LSSSLLA 23

RESULT 13
ID W56774 standard; Protein; 377 AA.
AC W56774;
DT 13-OCT-1998 (first entry)
DE Homo sapiens PSP1-3 consensus sequence.
KW PS-1; presenilin; presenilin-1; PSP1-3; Alzheimer's disease;
KW serine protease; neurodegeneration; predisposition; diagnosis.
OS Homo sapiens.
PN EP-828003-A2.
PD 11-MAR-1998.
PF 26-AUG-1997; 306501.
PR 13-DEC-1996; US-032875.
PR 06-SEP-1996; US-025436.
PR 25-OCT-1996; US-027873.
PA (SMIK) SMITHKLINE BEECHAM CORP.
PA (SMIK) SMITHKLINE BEECHAM PLC.
PI Browne MJ, Clinkenbeard HE, Creasy CL, Karran EH,
PI Livi GP, Southan CD;
DR WPI; 98-161101/15.
DR N-PSDB; V29537.
PT Nucleic acids encoding human serum protease protein(s) - used for
PT diagnosing pre-disposition to Alzheimer's disease, etc.
PS Claim 7; Page 41-42; 65pp; English.
CC The sequence is that of the consensus sequence of PSP1-3
CC serine protease which can be used to identify modulators of
CC serine protease activity and also to diagnose a condition
CC associated with lack of one of the serine proteases or
CC a genetic predisposition to neurodegeneration in a patient,
CC preferably predisposition to Alzheimer's disease.
SQ Sequence 377 AA;

Query Match 4.2%; Score 7; DB 33; Length 377;
Best Local Similarity 100.0%; Pred. No. 1.03e+01;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0

Db 345 lsssl la 351
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Qy      17 LSSSLLA 23


RESULT   14
ID   W00366 standard; Protein; 639 AA.
AC   W00366;
DT   18-FEB-1997  (first entry)
DE   Streptomyces lacto-N-biosidase.
KW   Lacto-N-biosidase; glycosylation; sugar chain.
OS   Streptomyces sp. 142 (FERM BP-4569).
PN   EP-739983-A2.
PD   30-OCT-1996.
PF   25-APR-1996; 106569.
PR   27-APR-1995; JP-129731.
PA   (TAKI ) TAKARA SHUZO CO LTD.
PI   Kato I,  Mitta M,  Sano M;
DR   WPI; 96-478747/48.
DR   N-PSDB; T41776.
PT   Streptomyces lacto-N-biosidase DNA - for prodn. of recombinant
PT   lacto-N-biosidase for determination of sugar chain structure and
PT   function
PS   Claim 1; Page 13-15; 27pp; English.
CC   Streptomyces sp. 142 lacto-N-biosidase (W00366) is capable of
CC   specifically acting on a sugar chain having the structure Gal
CC   beta1-3GlcNAc beta1-R (R is a sugar residue), and specifically
CC   catalysing the hydrolysis of the lacto-N-bioside bond only.  It
CC   is useful for studying the structure and biological activity of
CC   sugar chains, esp. in cell surface glycoproteins and glycolipids.
CC   Large-scale, low cost prodn. of the enzyme in transformed host
CC   cells is possible using a gene sequence (T41776) isolated from a
CC   genomic library of Streptomyces sp. 142.
SQ   Sequence   639 AA;

  Query Match             4.2%;  Score 7;  DB 20;  Length 639;
  Best Local Similarity 100.0%;  Pred. No. 1.03e+01;
  Matches     7;  Conservative    0;  Mismatches   0;  Indels   0;  Gaps   0;

Db    389 ssllaeg 395
          |||||||
Qy     19 SSLLAEG 25


RESULT   15
ID   W34153 standard; peptide; 16 AA.
AC   W34153;
DT   26-FEB-1998  (first entry)
DE   HIV-2 peptide fragment #1.
KW   Human T-cell leukaemia virus; HTLV; gp46; envelope protein; diagnosis;
KW   immunoassay reagent; antibody detection; adult T-cell leukaemia-lymphoma;
KW   ATL; infection prevention.
OS   Human immunodeficiency virus type 2.
FH   Key             Location/Qualifiers
FT   Misc_difference 16
FT                   /note= "optionally amidated"
PN   US5681696-A.
PD   28-OCT-1997.
PF   09-JAN-1987; 001885.
PR   22-JUN-1992; US-901874.
PR   09-JAN-1987; US-001885.
PR   13-JAN-1989; US-297635.
PR   24-JAN-1990; US-469291.
PR   01-JUN-1995; US-457865.
PA   (UNBI-) UNITED BIOMEDICAL INC.
PI   Wang CY;
DR   WPI; 97-535047/49.
PT   HTLV peptide(s) - useful as immunoassay reagents for diagnosis of
PT   adult T-cell leukaemia
PS   Disclosure; Column 8; 24pp; English.
CC   W34150-W34153 represent fragments of HIV-I and HIV-II. These sequences
CC   are analogous to the peptides of the invention. The peptides of the
CC   invention (see W34318-W34149) are fragments of HTLV-I (human T-cell
CC   lymphotropic virus I) and HTLV-II, and analogues of these fragments.
CC   Human T-cell lymphotropic virus is also known as human T-cell leukaemia
CC   virus. The HTLV sequences represent peptides of the invention, and have
CC   an optionally amidated C-terminus. The HTLV peptides may be used as
CC   immunoassay reagents for detecting antibodies to HTLV-I/HTLV-II in the
CC   diagnosis of adult T-cell leukaemia-lymphoma (ATL). The HTLV peptides can
CC   also be used to prevent HTLV infection.
SQ   Sequence   16 AA;

  Query Match             3.6%;  Score 6;  DB 25;  Length 16;
  Best Local Similarity 100.0%;  Pred. No. 1.37e+02;
  Matches     6;  Conservative    0;  Mismatches   0;  Indels   0;  Gaps   0;

Db      2 qarlns 7
          ||||||
Qy     38 QARLNS 43


RESULT   16
ID   R87551 standard; peptide; 16 AA.
AC   R87551;
DT   10-JUL-1996  (first entry)
DE   Peptide #12 for the detection of HTLV-I and HTLV-II antibodies.
KW   Immunoassay; antibody; human T-cell leukaemia virus; HTLV; HTLV-I; HIV-1;
KW   HTLV-II; adult T-cell leukaemia; leukaemia; HIV-2.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   modified_site   16
FT                   /note= "optionally amidated"
PN   US5476765-A.
PD   19-DEC-1995.
PF   22-JUN-1992; 901874.
PR   09-JAN-1987; US-001885.
PR   13-JAN-1989; US-297635.
PR   24-JAN-1990; US-469721.
PR   22-JUN-1992; US-901874.
PA   (UNBI-) UNITED BIOMEDICAL INC.
PI   Wang CY;
DR   WPI; 96-048978/05.
PT   Detecting and distinguishing between antibodies for HTLV-I and -II -
PT   using an assay utilising synthetic peptide(s), for the diagnosis of
PT   adult T cell leukaemia
PS   Claim 21; Column 36; 28pp; English.
CC   R87540-R87558 represent synthetic peptides used in the scope of the
CC   invention, to coat a solid support used in an immunoassay for detecting
CC   antibodies to human T-cell leukaemia viruses (HTLV), and diagnosis of
CC   adult T-cell leukaemia.  A test sample where HTLV-I and HTLV-II
CC   antibodies form a complex with the peptide used, is added to the solid
CC   support.  The mixture is then incubated and the complex detected.  The
CC   immunoassay can be used to detect HTLV-I and HTLV-II, and to distinguish
CC   between antibodies for each of these viruses.  It can also be used for
CC   the diagnosis of cell leukaemia.  This method eliminates false positives,
CC   and has an increased specificity and higher sensitivity than current
CC   methods.  This method can also be used to detect HIV-1 and HIV-2
CC   antibodies.
SQ   Sequence   16 AA;

  Query Match             3.6%;  Score 6;  DB 17;  Length 16;
  Best Local Similarity 100.0%;  Pred. No. 1.37e+02;
  Matches     6;  Conservative    0;  Mismatches   0;  Indels   0;  Gaps   0;

Db      2 qarlns 7
          ||||||
Qy     38 QARLNS 43


RESULT   17
ID   R06326 standard; peptide; 19 AA.
AC   R06326;
DT   13-DEC-1990  (first entry)
DE   Biotinylated monomeric peptide.
KW   HIV-2; streptavidin; cyclic.
OS   synthetic.
FH   Key             Location/Qualifiers
FT   misc_difference 1..1
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Qy     17 LSSSLLA 23


RESULT   14
ID   W00366 standard; Protein; 639 AA.
AC   W00366;
DT   18-FEB-1997  (first entry)
DE   Streptomyces lacto-N-biosidase.
KW   Lacto-N-biosidase; glycosylation; sugar chain.
OS   Streptomyces sp. 142 (FERM BP-4569).
PN   EP-739983-A2.
PD   30-OCT-1996.
PF   25-APR-1996; 106569.
PR   27-APR-1995; JP-129731.
PA   (TAKI ) TAKARA SHUZO CO LTD.
PI   Kato I,  Mitta M,  Sano M;
DR   WPI; 96-478747/48.
DR   N-PSDB; T41776.
PT   Streptomyces lacto-N-biosidase DNA - for prodn. of recombinant
PT   lacto-N-biosidase for determination of sugar chain structure and
PT   function
PS   Claim 1; Page 13-15; 27pp; English.
CC   Streptomyces sp. 142 lacto-N-biosidase (W00366) is capable of
CC   specifically acting on a sugar chain having the structure Gal
CC   beta1-3GlcNAc beta1-R (R is a sugar residue), and specifically
CC   catalysing the hydrolysis of the lacto-N-bioside bond only.  It
CC   is useful for studying the structure and biological activity of
CC   sugar chains, esp. in cell surface glycoproteins and glycolipids.
CC   Large-scale, low cost prodn. of the enzyme in transformed host
CC   cells is possible using a gene sequence (T41776) isolated from a
CC   genomic library of Streptomyces sp. 142.
SQ   Sequence   639 AA;

  Query Match             4.2%;  Score 7;  DB 20;  Length 639;
  Best Local Similarity 100.0%;  Pred. No. 1.03e+01;
  Matches     7;  Conservative    0;  Mismatches   0;  Indels   0;  Gaps   0;

Db    389 ssllaeg 395
          |||||||
Qy     19 SSLLAEG 25


RESULT   15
ID   W34153 standard; peptide; 16 AA.
AC   W34153;
DT   26-FEB-1998  (first entry)
DE   HIV-2 peptide fragment #1.
KW   Human T-cell leukaemia virus; HTLV; gp46; envelope protein; diagnosis;
KW   immunoassay reagent; antibody detection; adult T-cell leukaemia-lymphoma;
KW   ATL; infection prevention.
OS   Human immunodeficiency virus type 2.
FH   Key             Location/Qualifiers
FT   Misc_difference 16
FT                   /note= "optionally amidated"
PN   US5681696-A.
PD   28-OCT-1997.
PF   09-JAN-1987; 001885.
PR   22-JUN-1992; US-901874.
PR   09-JAN-1987; US-001885.
PR   13-JAN-1989; US-297635.
PR   24-JAN-1990; US-469291.
PR   01-JUN-1995; US-457865.
PA   (UNBI-) UNITED BIOMEDICAL INC.
PI   Wang CY;
DR   WPI; 97-535047/49.
PT   HTLV peptide(s) - useful as immunoassay reagents for diagnosis of
PT   adult T-cell leukaemia
PS   Disclosure; Column 8; 24pp; English.
CC   W34150-W34153 represent fragments of HIV-I and HIV-II. These sequences
CC   are analogous to the peptides of the invention. The peptides of the
CC   invention (esp. W34218-W34140) are fragments of HTLV-I (human T-cell
CC   virus. The HTLV sequences represent peptides of the invention, and have
CC   an optionally amidated C-terminus. The HTLV peptides may be used as
CC   immunoassay reagents for detecting antibodies to HTLV-I/HTLV-II in the
CC   diagnosis of adult T-cell leukaemia-lymphoma (ATL). The HTLV peptides can
CC   also be used to prevent HTLV infection.
SQ   Sequence   16 AA;

  Query Match             3.6%;  Score 6;  DB 25;  Length 16;
  Best Local Similarity 100.0%;  Pred. No. 1.37e+02;
  Matches     6;  Conservative    0;  Mismatches   0;  Indels   0;  Gaps   0;

Db     2 qarlns 7
          ||||||
Qy    38 QARLNS 43


RESULT   16
ID   R87551 standard; peptide; 16 AA.
AC   R87551;
DT   10-JUL-1996  (first entry)
DE   Peptide #12 for the detection of HTLV-I and HTLV-II antibodies.
KW   Immunoassay; antibody; human T-cell leukaemia virus; HTLV; HTLV-I; HIV-1;
KW   HTLV-II; adult T-cell leukaemia; leukaemia; HIV-2.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   modified_site   16
FT                   /note= "optionally amidated"
PN   US5476765-A.
PD   19-DEC-1995.
PF   22-JUN-1992; 901874.
PR   09-JAN-1987; US-001885.
PR   13-JAN-1989; US-297635.
PR   24-JAN-1990; US-469721.
PR   22-JUN-1992; US-901874.
PA   (UNBI-) UNITED BIOMEDICAL INC.
PI   Wang CY;
DR   WPI; 96-048978/05.
PT   Detecting and distinguishing between antibodies for HTLV-I and -II -
PT   using an assay utilising synthetic peptide(s), for the diagnosis of
PT   adult T cell leukaemia
PS   Claim 21; Column 36; 28pp; English.
CC   R87540-R87558 represent synthetic peptides used in the scope of the
CC   invention, to coat a solid support used in an immunoassay for detecting
CC   antibodies to human T-cell leukaemia viruses (HTLV), and diagnosis of
CC   adult T-cell leukaemia.  A test sample where HTLV-I and HTLV-II
CC   antibodies form a complex with the peptide used, is added to the solid
CC   support.  The mixture is then incubated and the complex detected.  The
CC   immunoassay can be used to detect HTLV-I and HTLV-II, and to distinguish
CC   between antibodies for each of these viruses.  It can also be used for
CC   the diagnosis of cell leukaemia.  This method eliminates false positives,
CC   and has an increased specificity and higher sensitivity than current
CC   methods.  This method can also be used to detect HIV-1 and HIV-2
CC   antibodies.
SQ   Sequence   16 AA;

  Query Match             3.6%;  Score 6;  DB 17;  Length 16;
  Best Local Similarity 100.0%;  Pred. No. 1.37e+02;
  Matches     6;  Conservative    0;  Mismatches   0;  Indels   0;  Gaps   0;

Db     2 qarlns 7
          ||||||
Qy    38 QARLNS 43


RESULT   17
ID   R06326 standard; peptide; 19 AA.
AC   R06326;
DT   13-DEC-1990  (first entry)
DE   Biotinylated monomeric peptide.
KW   HIV-2; streptavidin; cyclic.
OS   synthetic
```

FT /label=Lys, Orn, Acp, Abu
FT /note="Lys= N-epsilon-biotinyllysine or N-epsilon-
FT (biotinylaminocaproyl)lysine; Orn= N-delta-
FT biotinylornithine or N-delta-(biotinylamino-
FT caproyl)ornithine; Acp and Abu= biotinylated"
PN DE3901857-A.
PD 26-JUL-1990.
PF 23-JAN-1989; 901857.
PR 23-JAN-1989; DE-901857.
PA (BOEF) Boehringer Mannheim GMBH.
PI Klein C, Bayer H;
DR WPI; 90-232329/31.
PT Sensitive immunoassay of HIV-2 antibodies with low blank values -
PT by incubating sample in streptavidin coated tube with biotinylated
PT cyclic peptide and labelled antibody receptor.
PS Claim 3; page 4; 4pp; German.
CC This peptide is used in a sensitive immunoassay of HIV-2 antibodies
CC with low blank values. The nucleic acid sample is incubated, in a
CC streptavidin coated tube, with this biotinylated cyclic peptide and
CC a labelled receptor directed against the antibodies. The liq. and
CC solid phases are sepd. and the amt. of label in one of them is
CC measured. One or more of residues 2-4 can be absent.
CC See also R07508.
SQ Sequence 19 AA;

Query Match 3.6%; Score 6; DB 2; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.37e+02;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 2 qarlns 7
||||||
Qy 38 QARLNS 43

RESULT 18
ID W35484 standard; peptide; 20 AA.
AC W35484;
DT 22-APR-1998 (first entry)
DE HIV peptide from HIV gp36 peptide SEQ ID NO:28.
KW T-cell stimulatory peptide; immunogen; non-dendritic; carrier; tumour;
KW scaffold; inhibition; metastasis; wound healing; solid phase.
OS Human immunodeficiency virus type 1.
PN WO9738011-A1.
PD 16-OCT-1997.
PF 03-APR-1997; D00146.
PR 03-APR-1996; DK-000398.
PA (PEPR-) PEPRESEARCH AS.
PI Heegaard PMH, Jakobsen PH;
DR WPI; 97-512645/47.
PT Non-dendritic peptide carrier linked to a solid phase - useful as a
PT diagnostic agent and as a scaffold for production of chemical
PT derivatives
PS Example 5; Page 89; 262pp; English.
CC A non-dendritic peptide carrier (A) has been developed which is coupled
CC through a linker to a solid phase, forming a complex of (A)-solid phase.
CC Where (A) comprises 10-50 amino acids capable of forming a secondary
CC structure in a benign buffer after liberation from the solid phase, and
CC further the (A)-solid phase complex comprises an immunogenic substance
CC and/or an immune mediator coupled on (A). The present sequence
CC represents a peptide used in an example from the present invention. An
CC (A)-solid phase complex can be used as a scaffold for the production of
CC chemical derivatives, characterised by covalently attaching molecules at
CC attachment points. Alternatively (A) is used as a scaffold-peptide for
CC the incorporation into an Immunostimulating Complex (Iscom) resulting an
CC (A)-Iscom complex which is used for the chemical coupling of antigenic
CC substances in an aqueous solution by conjugation. (A) derivatised with
CC one or more peptides having fibronectin-, laminin- or vitronectin-like
CC binding activities can be used for the promotion of cell-attachment to
CC plastic surfaces, in particular to inhibit tumour growth and metastasis,
CC and for promotion of wound healing. Also a derivatised (A) can be used
CC for the selection of specifically-binding aptamers or as a diagnostic
CC agent. Such diagnostic-(A) molecules could be used to detect molecules
CC derived from or indicative of pregnancy or of a disease, such as an
CC infectious, autoimmune or cancerous disease.
SQ Sequence 20 AA;

Query Match 3.6%; Score 6; DB 27; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.37e+02;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 4 qarlns 9
||||||
Qy 38 QARLNS 43

RESULT 19
ID R05154 standard; protein; 20 AA.
AC R05154;
DT 09-OCT-1990 (first entry)
DE Fusion protein epitopic for gp41 glycoprotein of HIV-2.
KW HIV; AIDS; gp41; p24; vaccine.
OS Synthetic.
PN EP-371817-A.
PD 6-JUN-1990.
PF 30-NOV-1989; 312513.
PR 1-DEC-1988; GB-028097.
PA (WELL) Wellcome Foundation Ltd.
PI Duncan RJS;
DR WPI; 90-173162/23.
PT New peptide(s) which bind to antibody specific for HIV -
PT derived from portion of immuno:dominant epitope on the gp41
PT glycoprotein of HIV.
PS Disclosure; pp; English.
CC Fusion protein may be used to make test kits for both HIV-1 and
CC HIV-2 antibodies or antigens.
SQ Sequence 20 AA;

Query Match 3.6%; Score 6; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.37e+02;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 6 qarlns 11
||||||
Qy 38 QARLNS 43

RESULT 20
ID R05141 standard; protein; 20 AA.
AC R05141;
DT 09-OCT-1990 (first entry)
DE Peptide epitopic for HIV-1 and HIV-2.
KW HIV; AIDS; gp41; p24; vaccine.
OS Synthetic.
PN EP-371818-A.
PD 6-JUN-1990.
PF 30-NOV-1989; 312514.
PR 1-DEC-1988; GB-028098.
PA (WELL) Wellcome Foundation Ltd.
PI Duncan RJS;
DR WPI; 90-173163/23.
PT New peptide(s) which bind to antibody specific for HIV -
PT used for detection of antibody or antigen or for raising
PT specific antibodies.
PS Claim 1; Page 12; 13pp; English.
CC Protein may be used to make test kits for both HIV-1 and
CC HIV-2 antibodies or antigens.
SQ Sequence 20 AA;

Query Match 3.6%; Score 6; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.37e+02;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 6 qarlns 11
||||||
Qy 38 QARLNS 43

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RESULT   21
ID   R77670 standard; peptide; 20 AA.
AC   R77670;
DT   22-MAR-1996  (first entry)
DE   Thiol protected peptide 41-2-3GC mimic of HIV-1 epitope.
KW   epitope; presentation; HTLV-I; human T cell lymphotropic virus;
KW   cyclic viral protein epitope; HIV; human immunodeficiency virus;
KW   HIV; immunoreactivity.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   misc_difference 1..3
FT                   /note= "enhance the reactivity of the peptide"
FT
FT   modified_site   14
FT                   /note= "thiol protected"
FT
FT   modified_site   20
FT                   /note= "thiol protected, and amidated"
FT
PN   US5439792-A.
PD   08-AUG-1995.
PF   02-JUN-1989; 360513.
PR   02-JUN-1989; US-360513.
PR   04-JUN-1990; US-532429.
PR   21-OCT-1993; US-140696.
PA   (GENE-) GENETIC SYSTEMS CORP.
PI   Blake J,  Cole C,  Coleman PF,  Monji N,  Montana JP;
DR   WPI; 95-283088/37.
PT   Solid phase coated with cyclic viral protein epitope with improved
PT   presentation and increased immuno-reactivity - useful for detecting
PT   HIV antibodies or antigens.
PS   Disclosure; Column 8; 13pp; English.
CC   R77670 mimics a cyclic epitope from human immunodeficiency virus type 2.
CC   The peptide is derived from Peptide 41-2-3 (sic). This peptide is is
CC   used in the prepn. of a solid phase coated with cyclic viral protein
CC   epitope with improved presentation and increased immunoreactivity, useful
CC   for detecting HIV antibodies or antigens.  The peptide is synthesised
CC   with 2 Cys residues sepd. by 3-19 non-Cys residues.  The SH gps. of Cys
CC   residues are protected, eg. with a thiol gp., so that the residue is
CC   resistant to highly acidic cleavage. The protected peptide is immobilised
CC   on a solid phase and the protecting gps. then removed.  The solid phase
CC   coated with peptide is then incubated so that a disulphide bridge is
CC   formed between the deprotected Cys residues.
SQ   Sequence   20 AA;

  Query Match             3.6%;  Score 6;  DB 15;  Length 20;
  Best Local Similarity 100.0%;  Pred. No. 1.37e+02;
  Matches    6;  Conservative    0;  Mismatches   0;  Indels   0;  Gaps   0;

Db       6 qarlns 11
           ||||||
Qy      38 QARLNS 43


RESULT   22
ID   P91159 standard; peptide; 23 AA.
AC   P91159;
DT   26-APR-1990  (first entry)
DE   Artificial peptide containing a sequence which comprises an epitope
DE   of HIV
KW   Artificial HIV peptide; HIV epitope; immunoassay kit; HIV vaccine;
KW   artificial antigen.
KW
FH   Key             Location/Qualifiers
FT   region          13..19
FT                   /note="This sequence is specifically claimed. "
FT
PN   WO8903844-A.
PD   05-MAY-1989.
PF   27-OCT-1988; SE0570.
PR   28-OCT-1987; SE-004185.
PA   (FERR) Ferring AB.
PI   Trojnar J, Wahren B, Ruden U;
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PT   located on each side of a HIV epitope
PS   Claim 2; Page 21, lines 35-37; 27pp; English.
CC   It has an amino acid sequence which corresp. to a naturally occurring
CC   amino acid sequence for an epitope of HIV, and which further has two
CC   Cys residues on each side of the epitope. It is stabilised by a sulphur
CC   bridge between the 2 Cys residues formed by a chemical oxidation step.
CC   Also claimed are peptides having a shorter sequence. It provides
CC   an assay for the detn. of antibodies induced by HIV for use in
CC   diagnostic immunoassay kits. It may also be used as an immunising
CC   component in vaccine compsns. against HIV.
SQ   Sequence   23 AA;

  Query Match             3.6%;  Score 6;  DB 1;  Length 23;
  Best Local Similarity 100.0%;  Pred. No. 1.37e+02;
  Matches    6;  Conservative    0;  Mismatches   0;  Indels   0;  Gaps   0;

Db       5 qarlns 10
           ||||||
Qy      38 QARLNS 43


RESULT   23
ID   R88186 standard; Protein; 72 AA.
AC   R88186;
DT   25-JUL-1996  (first entry)
DE   Protein encoded by plasmid pAK559 DNA fragment.
KW   Leader sequence; MI3; insulin precursor; Saccharomyces cerevisiae;
KW   strain; yAK580; expression; secretion; cassette; alpha-factor;
KW   mouse salivary amylase; carboxypeptidase; yeast; plasmid pAK559;
KW   aspartic protease 3; BAR1; KEX2 protease; direct template;
KW   yAK583.
OS   Synthetic.
PN   WO9534666-A1.
PD   21-DEC-1995.
PF   16-JUN-1995; DK0249.
PR   16-JUN-1994; DK-000705.
PR   29-JUL-1994; US-282852.
PA   (NOVO ) NOVO-NORDISK AS.
PI   Kjeldsen TB,  Vad K;
DR   WPI; 96-049693/05.
DR   N-PSDB; T10541.
PT   Expression cassette for yeast contg. synthetic leader sequence
PT   providing high yields of secreted polypeptide encoded by the
PT   cassette, also related vectors and transformed yeast cells
PS   Example 6; Fig 16; 85pp; English.
CC   The present sequence is encoded by a DNA fragment of plasmid
CC   pAK559, which was used as the direct template in the construction
CC   of the MI3 insulin precursor (IP) leader sequences (LS) R88168/69.
CC   The LS are used to express the MI3 IP in S. cerevisiae strains
CC   yAK580/83, providing high level expression and secretion. An
CC   expression cassette for the MI3 IP in yeast, comprises 5'-3' a
CC   promoter (P), sequences encoding a signal peptide (SP), a leader
CC   sequence, a processing site (PS) and the MI3 IP and an optional
CC   terminator sequence. The P can be any P functional in yeast, e.g.
CC   the alpha-factor gene P, and the SP is pref. the alpha-factor,
CC   mouse salivary amylase, carboxypeptidase, yeast aspartic
CC   protease 3 or yeast BAR1 SP. The PS is LysArg, ArgLys, ArgArg or
CC   LysLys, for processing by S. cerevisiae KEX2 protease.
SQ   Sequence   72 AA;

  Query Match             3.6%;  Score 6;  DB 17;  Length 72;
  Best Local Similarity 100.0%;  Pred. No. 1.37e+02;
  Matches    6;  Conservative    0;  Mismatches   0;  Indels   0;  Gaps   0;

Db       8 savlss 13
           ||||||
Qy      14 SAVLSS 19


RESULT   24
ID   W78751 standard; Protein; 124 AA.
AC   W78751;
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